

IN THE CLAIMS:

1. (presently presented) A composite ply structure (40A) as an intermediate article of manufacture for use as a carcass ply for a tire (10), the composite ply structure (40) has a primary ply (40A) reinforced by cords (41), the cords (41) being encapsulated in unvulcanized rubber (44), a pair of ply extensions (40B) reinforced by flexible cords (43), the flexible cords (43) being encapsulated in unvulcanized rubber (44), the ply extensions (40B) each have an end (33) overlappingly joined to the primary ply (40A) at a first end (75) and the other ply extension (40B) being joined at a second end (76) of the primary ply (40A), the composite ply (40) characterized by:

the primary ply cords (41) being substantially inextensible and the cords (43) of the ply extensions being flexible and substantially extensible relative to the primary ply cords (41);

a joint interface (70) between the overlapping ply extensions (40B) and the primary ply (40A), the joint interface (70) being at least surface precured sufficient to prevent slippage of the ply extension (40B) relative to the primary ply (40A) during subsequent shaping and curing of the carcass, wherein all stretching occurs in the ply extension cords (43).

2. (presently presented) The composite ply (40) of claim 1 further characterized by the overlapping joint interface (70) being at least 1 cm in width.

3. (presently presented) The composite ply (40) of claim 1 wherein the cords (41) of the primary ply (40A) are radially oriented in the range of 65° to 90° relative to the ply length.

4. (currently amended) ~~[[the]]~~ The composite ply (40) of claim 3 wherein the cords (43) of the ply extension (40B) are oriented radially in the range of 65° to 90° relative to the ply length.

5. (presently presented) The composite ply (40) of claim 3 wherein the cords (43) of the ply extension (40B) are oriented at a bias angle relative to the ply length.

6. (presently presented) The composite ply (40) of claim 1 wherein the cords (41) of the primary ply are made of steel, Kevlar™, or glass and cords (43) are synthetic cords made of aramid, rayon, nylon or polyester.

Claims 7-11 (canceled)